Application No.: 10/070,277 Inventor: EHRHARDT

Reply to Office Action of January 12, 2007

Docket No.: 50716

REMARKS/ARGUMENTS

Claim Amendments

Claims 1-51 are pending. Claims 1-34 are canceled and Claims 35-51 are new. Support for the new claims can be found in at least canceled claims 1-34. No new matter has been added. or new issues raised by the instant amendments. More specifically, with regard to claims 35, 47, 50 and 51, Applicant respectfully submits that the instant specification describes "functionally equivalent DNA sequences which encode a dihydroorotase gene, and which, based on the total length of the gene, show 80-100% sequence homology with the DNA sequence of SEQ ID NO: 1." (See, e.g., Page 6, lines 33-37) and that the recitation of "at least 80% homology is equivalent to "80-100%." Additionally, with regard to claims 37, 47 and 51, Applicant respectfully submits that "one skilled in the art would consider [95% to be] inherently supported by the discussion in the original disclosure [of the range of 80-100%]." MPEP 2163.05 (emphasis added); See also, In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976), the ranges described in the original specification included a range of "25%- 60%" and specific examples of "36%" and "50%." A corresponding new claim limitation to "at least 35%" did not meet the description requirement because the phrase "at least" had no upper limit and caused the claim to read literally on embodiments outside the "25% to 60%" range, however a limitation to "between 35% and 60%" did meet the description requirement." (Emphasis added).

Applicant hereby reserves the right to re-present the subject matter of any canceled claims in the instant application and/or in a continuing application.

Withdrawal of Claims

The Examiner withdrew previous claims 21 & 24-32 from consideration on grounds that the claims were drawn to a non-elected invention. More specifically, the Examiner indicated that such claims were distinct from the originally elected claims in that they did not require DNA for the production of a dihydroorotase or a protein having dihydroorotase activity and that "[t]he invention of claims 21 & 24-32 [was] therefore distinct as not requiring the recombinant production of dihydroorotase as compared to the instantly prosecuted invention requiring the

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recombinant production of dihydroorotase."

New independent claims 35, 47 and 50 each recite "said dihydroorotase or said protein

are generated from the expression of a DNA sequence having a homology of at least 80% with

SEQ ID NO: 1" such that they all share a similar special technical feature in accordance with the

PCT Unity of Invention rules. Accordingly, such claims read on the elected invention and

joinder and consideration of claims 35-51 is respectfully requested.

Claim Objections

The Examiner objected to claims 9-10, 14, 19-20 and 33-34 under 37 CFR 1.75(c) as

being improper dependent form. Applicant has canceled such claims and has presented new

claims 35-51, which render the objection moot.

Withdrawal of the objection is requested.

Claim Rejections under 35 USC § 112, first paragraph

The Examiner rejected claims 33-34 as allegedly not being enabled for "any DNA

sequence having at least 40% homology to SEQ ID NO: 1 and which encodes a protein having

enzymatic activity of a dihydroorotase.

Applicant has canceled claims 33-34 thereby rendering the rejection moot.

Notwithstanding, new independent claims 35, 47 and 50 each recite "said dihydroorotase or said

protein are generated from the expression of a DNA sequence having a homology of at least 80%

with SEQ ID NO:1," and dependent claims 37, 49 and 51 each recite that "the dihydroorotase or

the protein is generated from the expression of a DNA sequence having a homology of at least

95% with SEQ ID NO:1." Accordingly, in view of the fact that the instant specification provides

considerable direction and guidance by virtue of a number of examples illustrating how the

claimed invention may be made and used, there was a high level of skill in the art at the time the

application was filed, and because all of the methods needed to practice the invention were

known at the time the application was filed, the claimed invention would not require undue

experimentation to obtain a dihydroorotase or said protein are generated from the expression of a

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DNA sequence having a homology of at least 80% and/or 95% homology with SEQ ID NO:1.

In view of the above, the rejection should be withdrawn.

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Conclusion

Applicant respectfully submits that the present application is in condition for allowance, which action is courteously requested. Please charge any shortage in fees due in connection with the filing of this paper to Deposit Account 14.1437. Please credit any excess fees to such account. If the Examiner believes that a teleconference/discussion of the application is likely to lead to the allowance and/or further expedite the application, the Examiner is kindly directed to contact the undersigned at the telephone number below.

Respectfully submitted,

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